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| 10/044,203 | 01/10/2002 | Rick L. Allison | 1322/84 | 9749 |
| 25297 | 7590 | 08/08/2006 | EXAMINER | |
| JENKINS, WILSON, TAYLOR & HUNT, P. A. | | | HU, JINSONG | |
| 3100 TOWER BLVD | | | ART UNIT | |
| SUITE 1200 | | | PAPER NUMBER | |
| DURHAM, NC 27707 | | | 2154 | |

DATE MAILED: 08/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/044,203

Applicant(s)

ALLISON ET AL.

Examiner

Jinsong Hu

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>5/8/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The affidavit filed on 5/8/06 under 37 CFR 1.131 has been considered but is ineffective to overcome the Murai reference (prior art reference for previous office action).

The evidence submitted is insufficient to establish a conception of the invention prior to the effective date of the Murai reference. While conception is the mental part of the inventive act, it must be capable of proof, such as by demonstrative evidence or by a complete disclosure to another. Conception is more than a vague idea of how to solve a problem. The requisite means themselves and their interaction must also be comprehended. See *Mergenthaler v. Scudder*, 1897 C.D. 724, 81 O.G. 1417 (D.C. Cir. 1897). The attorney's time record only indicated the time of conferences between the inventor and the attorney for an application named as "Methods And System For Providing Gateway Location Register Functionality At A Network Routing Node" (the title is different from the tile of 10/044,203). Applicant does not provide any documents to prove that the concepts have been established prior to the effective date of the Murai reference.

The evidence submitted is insufficient to establish diligence from a date prior to the date of reduction to practice of the Murai reference to either a constructive reduction to practice or an actual reduction to practice. The e-mail and invoice provided by applicant indicated the time (11/26/01 – 1/9/02) for the discussions made between inventor and the attorney, which is later than the effective date of the Murai reference.

Furthermore, the content of the screenshot does not disclose the steps of extracting mobile subscriber information from a first signaling message, caching the mobile subscriber information, and using the cached information in the processing and routing of subsequent signaling messages transmitted mobile subscriber by the HLR or the VLR relating to the mobile subscriber. The screenshot also indicated that the content was created on 10/12/01, which is later than the effective date of the Murai reference.

Accordingly, the affidavit is ineffective to overcome the Murai reference.

2. Claims 1-40 are presented for examination. Claims 1, 15 and 29 have been amended. Claims 39 and 40 are newly added claims.
3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Applicant's arguments with respect to claims 1-40 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-12 and 15-40 are rejected under 35 U.S.C. 102(e) as being anticipated by Kowarsch (US 2004/0132449).

6. As per claims 1, 5-6 and 37, Kowarsch teaches the invention as claimed a method for mobile subscriber location management and for routing messages in a mobile communications network environment, the method comprising:

in a routing node separate from a home location register (HLR) and a visitor location register (VLR) and being located in a communication path between the HLR and the VLR [115, Fig. 1; pars. 129-132]:

receiving signaling messages transmitted between an HLR and a VLR related to the location or subscription of a mobile subscriber, extracting mobile subscriber information from a first signaling message, caching the mobile subscriber information [pars. 86-88 & 129-130]; and

using the cached information in the processing and routing of subsequent signaling messages transmitted by the HLR or the VLR relating to the mobile subscriber [pars. 131, 132 & 136].

7. As per claims 2-3 and 9, Kowarsch teaches the step of receiving signaling messages includes receiving a mobile application part (MAP) UpdateLocation message and a mobile application part (MAP) InsertSubscriberData message [pars. 147 & 148].

8. As per claim 4, Kowarsch teaches the step of extracting information from the first message includes extracting a mobile switching center (MSC) identifier that identifies an MSC serving the mobile subscriber [pars. 126, 131 & 147].

9. As per claims 7 and 8, Kowarsch teaches the step of caching the mobile subscriber information includes storing the information in a visitor location cache (VLC) and caching the information includes storing the information in a home location cache (HLC) [pars. 85 & 125].

10. As per claim 10, Kowarsch teaches the step of using the cached information in the processing and routing of subsequent mobile signaling messages includes using the cached information to generate and route a ProvideRoamingNumber_Ack message on behalf of a VLR in response to a received ProvideRoamingNumber message [pars. 125 & 126].

11. As per claims 11-12, Kowarsch teaches the step of using the cached information in the processing and routing of subsequent mobile signaling messages includes using the cached information to process and route a received CancelLocation message [pars. 185 & 186].

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12. As per claims 15-28, since they teaching same limitations as claims 1-12 form different prospectors (router side and HLR side), they are rejected under the same basis as claims 1-12 above.

13. As per claims 29-36 and 38, since they are system claims of claims 1-12, they are rejected under the same basis as claims 1-12 above.

14. As per claim 39, Kowarsch teaches the invention as claimed including a method for mobile subscriber location messages in a mobile communications network comprising:

in a routing node separate from a home location register (HLR) and a visitor management and for routing environment, the method location register (VLR) and being located in a communication path between the HLR and the VLR [115, Fig. 1; pars. 129-132]:

receiving a signaling message directed toward the HLR originating from the VLR related to a change in location of a mobile subscriber [par. 152];

generating a response message to the VLR on behalf of the HLR using cached information related to the mobile subscriber without forwarding the signaling message to the HLR [pars. 150, 151, 153-156]; and

sending the response message to the VLR [par. 157].

15. As per claim 40, since the claim discloses the same limitation as claim 39 from different prospector [i.e., behalf of HLR and behalf of VLR] and Kowarsch also teaches the router could processes the request behalf of VLR [pars. 89-90], the claim is rejected for the same basis as claim 39 above.

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kowarsch (US 2004/0132449) as applied to claims 1-12 and 15-40 above, in view of Official Notice.

18. As per claims 13 and 14, Kowarsch teaches the invention substantially as claimed in claim 1. Kowarsch also teaches a signaling/IP gateway [col. 5, lines 14-17]. Kowarsch does not specifically teach the signaling network is SS7. However, official Notice is taken that the SS7 is well known in the art for setting up a call via high speed switched connection. One of ordinary skill in the art would have been motivated to modify Kowarsch's system to increase the efficiency of the system.

Conclusion

19. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

20. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jinsong Hu whose telephone number is (571) 272-3965. The examiner can normally be reached on 8:00 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A. Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

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published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Jinsong Hu

August 2, 2006

A handwritten signature in black ink, appearing to read 'Viet D. Vu', with a stylized, cursive script.

VIET D. VU
PRIMARY EXAMINER